6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 51

[EPA-HQ-OAR-2010-1076; FRL-]

RIN 2060-AQ97

Air Quality: Widespread Use for Onboard Refueling Vapor Recovery and Stage II Waiver

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA is proposing criteria for determining whether onboard refueling vapor recovery (ORVR) is in widespread use for purposes of controlling motor vehicle refueling emissions throughout the motor vehicle fleet. The EPA is also proposing to determine the date at which such widespread use of ORVR will occur. Once the Administrator has determined that widespread use has occurred, the Administrator may waive Clean Air Act (CAA or Act) statutory requirements for states to implement Stage II gasoline vapor recovery systems at gasoline dispensing facilities in areas classified

"Serious," "Severe," or "Extreme" for nonattainment of the ozone national ambient air quality standard (NAAQS). Based on the proposed criteria, the EPA is proposing to determine that June 30, 2013, will be the date when "widespread use" will occur and the Stage II waiver will be effective. This rulemaking was identified as an example of examining rules to make sure they are still achieving the environmental benefit that was originally intended.

DATES: Comments must be received on or before **[INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].**

Public Hearing: If anyone contacts us requesting to speak at a public hearing on or before **[INSERT DATE 15 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER],** we will hold a public hearing. Additional information about the hearing would be published in a subsequent Federal Register notice.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2010-1076, by one of the following methods:

- www.regulations.gov. Follow the on-line instructions for submitting comments.
- Email: a-and-r-docket@epamail.epa.gov, Attention Docket ID No. EPA-HQ-OAR-2010-1076
- Fax: 202-566-1541, Attention Docket ID No. EPA-HQ-OAR-2010-1076

- Mail: Air and Radiation Docket and Information Center, Attention Docket ID No. EPA-HQ-OAR-2010-1076, Environmental Protection Agency, 1301 Constitution Ave., NW, Washington, DC 20460, Mailcode: 6102T. Please include two copies if possible.
- Hand Delivery: Air and Radiation Docket and Information Center, Attention Docket ID No. EPA-HQ-OAR-2010-1076, Environmental Protection Agency in the EPA Headquarters Library, Room Number 3334 in the EPA West Building, located at 1301 Constitution Avenue, NW, Washington, DC. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-HQ-OAR-2010-1076. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov, or email. The www.regulations.gov website is an "anonymous access" system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you

send an email comment directly to the EPA without going through www.regulations.gov, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at http://www.epa.gov/epahome/dockets.htm.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Air and Radiation Docket and Information Center in the EPA Headquarters Library, Room Number 3334 in the EPA West Building, located at 1301

Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744.

FOR FURTHER INFORMATION CONTACT: Mr. Lynn Dail, Office of Air Quality Planning and Standards, Air Quality Policy Division, Mail code C539-02, Research Triangle Park, NC 27711, telephone (919) 541-2363; fax number: 919-541-0824; email address: dail.lynn@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

Entities directly affected by this action include states (typically state air pollution control agencies) and, in some cases, local governments that develop air pollution control rules that apply to areas classified as "Serious," "Severe," or "Extreme" for nonattainment of the ozone NAAQS. Individuals and companies that operate gasoline dispensing facilities may be indirectly affected by virtue of state action in State Implementation Plans (SIPs) that implement provisions resulting from final rulemaking on this action; many of these sources are in the following groups:

Industry group	SIC[a]	NAICS[b]
Gasoline stations	5541	447110, 447190

[a] Standard Industrial Classification.
[b] North American Industry Classification System.

B. What should I consider as I prepare my comments for the EPA?

1. Submitting CBI. Do not submit this information to the EPA through regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to the EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. Tips for Preparing Your Comments.

When submitting comments, remember to:

• Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).

• Follow directions - The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

• Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

• Describe any assumptions and provide any technical information and/or data that you used.

• If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

• Provide specific examples to illustrate your concerns, and suggest alternatives.

• Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

• Make sure to submit your comments by the comment period deadline identified.

C. How can I find information about a possible public hearing?

Public Hearing: To request a public hearing or information pertaining to a public hearing on this document, contact Ms. Pamela S. Long, Air Quality Policy Division, Mail code C504-03, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541-0641, facsimile number (919) 541-5509, email address: long.pam@epa.gov.

D. How is this preamble organized?

The information presented in this preamble is organized as follows.

II. Background

A. What requirements for Stage II gasoline vapor recovery apply for ozone nonattainment areas?

Under CAA section 182(b)(3), Stage II vapor recovery systems are required to be used at larger gasoline dispensing facilities located

in "Serious," "Severe," and "Extreme" nonattainment areas for ozone.[1] Based on deadlines established in the Act, within 24 months from the effective date of the initial area designation and classification, states must adopt a Stage II program into their SIPs, and the controls must be installed according to specified deadlines following state rule adoption. For existing facilities, the installation deadlines depend on the date the facilities were built and the monthly volume of gasoline dispensed. See CAA sections 182(b)(3)(A)-(B), and 324(a)-(c).[2]

However, the CAA provides discretionary authority to the EPA Administrator to, by rule, revise or waive the section 182(b)(3) Stage II requirement after the Administrator determines that ORVR is

[1] See CAA section 182(b)(3), 42 U.S.C. 7511a(b)(3). Originally, the section 182(b)(3) Stage II requirement also applied in all Moderate ozone nonattainment areas. However, under section 202(a)(6) of the CAA, 42 U.S.C. 7521(a)(6), the requirements of section 182(b)(3) no longer apply in Moderate ozone nonattainment areas after EPA promulgated ORVR standards on April 6, 1994, 59 FR 16262, codified at 40 CFR parts 86 (including 86.098-8), 88 and 600. Under implementation rules issued in 2002 for the 1997 8-hour ozone standard, EPA retained the Stage II-related requirements under section 182(b)(3) and as they applied for the 1-hour ozone standard. 40 CFR 51.900(f)(5) and 40 CFR 51.916(a).

[2] Section 182(b)(3)(B) has the following effective date requirements for implementation of Stage II after the adoption date by a state of a Stage II rule: 6 months after adoption of the state rule, for gas stations built after the enactment date (which for newly designated areas would be the designation date); 1 year after adoption date, for gas stations pumping at least 100,000 gal/month based on average monthly sales over 2-year period before adoption date; and 2 years after adoption, for all others.

in widespread use throughout the motor vehicle fleet. See CAA section 202(a)(6). The EPA first began the phase-in of ORVR by requiring that 40 percent of passenger cars manufactured in model year 1998 be equipped with ORVR. The ORVR requirement for passenger cars was increased to 100 percent by model year 2000. Phase-in continued for other vehicle types and ORVR has been a requirement on virtually all new gasoline-powered motor vehicles (passenger cars, light trucks, and complete heavy-duty gasoline powered vehicles under 10,000 lbs gross vehicle weight rating (GVWR)) sold since model year 2006. See 40 CFR part 86. Currently, ORVR-equipped vehicles comprise approximately 64 percent of the in-service vehicle fleet nationwide, and account for around 74 percent of the vehicle miles traveled (VMT) in the nationwide fleet. The percentage of non-ORVR vehicles and the percentage of VMT driven by those vehicles declines each year as these older vehicles wear out and are removed from service. Since certain vehicles are not required to have ORVR, including motorcycles and incomplete heavy-duty gasoline powered truck chassis, under current requirements the nationwide motor vehicle fleet would never be entirely equipped with ORVR.

The EPA has been evaluating appropriate criteria for determining when widespread use of ORVR has occurred and for granting waivers to the section 182(b)(3) Stage II requirement and has issued policy

memoranda addressing the issue in limited contexts.[3] As discussed in these memoranda, the EPA interprets section 202(a)(6) of the CAA to give discretion to the Administrator to revise or waive the section 182(b)(3) requirement when widespread use occurs either through a single national rulemaking or separate determinations for specific areas. By its terms, section 202(a)(6) does not specify the scope or type of motor vehicle fleet for which the EPA must find ORVR is in widespread use before revising or waiving the section 182(b)(3) Stage II requirement. Nor does the statutory language preclude revising or waiving the requirement for individual "Serious," "Severe" or "Extreme" nonattainment areas, or distinguishing between different types of areas (e.g., the EPA could determine widespread use has occurred at different times for different areas, and revise or waive section 182(b)(3) Stage II requirements accordingly). Therefore, the EPA retains significant discretion in this matter.

[3] See, e.g., Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, and Margo Tsirigotis Oge, Director, Office of Transportation and Air Quality, to Regional Air Division Directors, "Removal of Stage II Vapor Recovery in Situations Where Widespread Use of Onboard Refueling Vapor Recovery is Demonstrated" (Dec. 12, 2006); see also, Memorandum from Stephen D. Page and Margo Tsirigotis Oge, "Removal of Stage II Vapor Recovery from Refueling of Corporate Fleets" (Nov. 28, 2007). Both of these memoranda are included in the docket for this proposed rulemaking, docket number EPA-HQ-OAR-2010-1076.

Based on our evaluation of the available data and appropriate criteria for determining that widespread use of ORVR has occurred, the EPA is proposing a determination of ORVR widespread use and a general waiver of the section 182(b)(3) Stage II requirement effective nationwide, on June 30, 2013. If promulgated, this would apply to any area that currently requires a Stage II program under section 182(b)(3). Additionally, any nonattainment area classified "Serious," "Severe," or "Extreme" for the first time after approximately January 1, 2011, would not be required to adopt and implement a new Stage II program under section 182(b)(3). This is because such areas, under the terms of section 182(b)(3), would not be required to implement Stage II programs until 2 and a half years after such classification, which would be the effective date of the proposed widespread use determination and section 182(b)(3) waiver.

We also propose that individual states (with or without existing Stage II programs) may separately submit SIP revisions to the EPA that demonstrate that ORVR widespread use has occurred (or will occur) on a date earlier than June 30, 2013, for areas in their states, and request that the EPA revise or waive the section 182(b)(3) requirement as it applies to only those areas. Such a separate demonstration would require an EPA rulemaking and the Administrator's approval before it could be effective. States may use

the procedures discussed in Section II E. titled Analytical Approaches to Determining Whether ORVR is in Widespread Use with area-specific data rather than the generalized, national data shown in Table 1 in that section.

Subsequent to the effective waiver date of the section 182(b)(3) Stage II requirement, areas currently implementing SIP-approved Stage II programs, as a result of obligations under the 1-hour or 1997 8-hour ozone NAAQS, would be required to continue implementing these programs until an EPA SIP revision approves removal of the requirement from the state's ozone implementation plan. Although the EPA is proposing to determine that ORVR is in widespread use as of June 30, 2013, states may prepare and submit SIP revisions before that date so that the EPA can review and approve such SIP revisions as soon as possible after June 30, 2013.

To approve a SIP revision removing Stage II provisions, the EPA must ensure that such removal would not interfere with other applicable CAA requirements under section 110(l), which precludes the Administrator from approving a SIP revision if it would interfere with applicable CAA requirements (including attainment and maintenance of the ozone NAAQS). This is discussed in more detail in Section III of this preamble. Of course, even after the EPA takes final action to find widespread use of ORVR has occurred and issues a

waiver of the section 182(b)(3) requirement, states remain free under CAA section 116 to choose to implement Stage II programs in any area, and would not be forced to remove existing Stage II provisions from a SIP.

B. Stage II Vapor Recovery Systems

When an automobile or other vehicle is brought into a service station to be refueled, the empty portion of the fuel tank on the vehicle contains gasoline vapors. When liquid gasoline is pumped into the partially empty gas tank the vapors are forced out of the tank as the tank fills with liquid gasoline. Where air pollution control technology is not used, these vapors are emitted into the air. In the atmosphere, these vapors can react with sunlight, nitrogen oxides and other volatile organic compounds to form ozone. In order to prevent this, the 1990 CAA Amendments added section 182(b)(3), requiring owners or operators of gasoline dispensing facilities in Moderate, Severe or Extreme ozone nonattainment areas to install and operate a system for recovery of gasoline vapor from the fueling of motor vehicles. This requirement only applies to facilities that sell more than a specified number of gallons per month and is set forth in sections 182(b)(3)(A)-(C) and 324(a)-(c). States were required to adopt rules for this requirement no later than 2 years after the enactment of the 1990 CAA Amendments. As a consequence of these

provisions, gas station owners and operators in Moderate, Severe, or Extreme nonattainment areas have installed these vapor control systems, known as "Stage II controls."[4]

Stage II control systems often have a rubber boot around the gasoline nozzle spout that fits snugly up to a vehicle's gasoline fill pipe during refueling of the vehicle. Gasoline vapors from the fill pipe are forced into this sleeve (rubber boot) rather than emitted into the air. Typically, a separate hose allows the vapor to flow back into the underground gasoline storage tank. A concentric hose (one hose inside another) is commonly used; gasoline flows through one of the hoses into the vehicle and vapors flow back through the other hose into the dispenser and from there through underground piping to the underground storage tank.

There are two basic approaches to Stage II vapor recovery: balance and vacuum assist. With a balance system, when gasoline in the underground tank is pumped into a vehicle, a positive pressure differential is created between the vehicle tank and the underground tank. This pressure differential draws the gasoline vapors from the

[4] This designation is to distinguish them from vapor recovery systems on the transport tanker trucks that deliver gasoline to the service stations, which are known as Stage I systems. Stage I systems direct vapors from the underground storage tank at the service station back into the tanker truck as the underground tank is filled with liquid gasoline from the tanker truck.

vehicle fill pipe through the rubber boot and the concentric hoses and underground piping into the underground tank. This is known as a balance system, since the gasoline vapors from the vehicle tank flow into the underground tank to balance pressures.

Another type of Stage II system uses a vacuum pump on the vapor return line to help draw vapors from the automobile fill pipe into the underground storage tank. An advantage of this type of system is that the rubber boot around the nozzle can be smaller and lighter (or not used at all) and still draw the vapors into the vapor return hose. This makes for an easier-to-handle nozzle, which is popular with customers. This type of Stage II system is known as a vacuum assist system.

The in-use efficiency of a Stage II program is directly proportional to the proper installation, operation, and maintenance of the control equipment at the gasoline dispensing facilities.[5] Damaged, missing, or improperly operating components or systems can significantly degrade the control effectiveness of a Stage II system. Experience has shown that frequent inspections are necessary to ensure that the Stage II equipment is working as designed. Although

[5] The Petroleum Equipment Institute has published recommended installation practices (PEI/RP300-93) and most states require inspection, testing, and evaluation before a system is commissioned for use.

new Stage II equipment may be required to achieve 95 percent control effectiveness at certification, studies have shown that in-use control efficiency depends on frequent inspection by state agencies and operator actions. The EPA guidance specifies minimum training, inspection, and testing criteria, and most states have adopted and supplemented these as deemed necessary for balance and vacuum assist systems.[6] However, in-use effectiveness ultimately depends on the consistency of inspections, follow-up by state agencies, and follow through by operators to perform inspections and conduct maintenance in a correct and timely manner. The EPA studies have calculated in-use efficiencies of 92 percent with semi-annual inspections, 86 percent with annual inspections and 62 percent with minimal or less frequent state inspections.[7] In-use Stage II vapor recovery system efficiency depends heavily on inspection frequency and maintenance efforts and the vigilance of station owners and states in these areas. Thus, the in-use effectiveness of Stage II within any state or nonattainment area may vary over time. Nonetheless, for over 15 years this technology has provided substantial VOC emission reductions in

[6] "Enforcement Guidance for Stage II Vehicle Refueling Control Programs" U.S. EPA, Office of Air and Radiation, Office of Mobile Sources, December 1991.

[7] "Technical Guidance – Stage II Vapor Recovery Systems for Control of Vehicle Refueling at Gasoline Dispensing Facilities Volume I: Chapters" EPA-450/3-91-022a, November 1991.

ozone nonattainment areas, which needed those reductions to attain the ozone NAAQS as well as reductions in air toxic emissions such as benzene.

C. Onboard Refueling Vapor Recovery (ORVR) Systems

In addition to Stage II controls, the 1990 CAA Amendments required another method of controlling these emissions. Section 202(a)(6) of the CAA requires an onboard system of capturing vehicle refueling emissions, commonly referred to as an ORVR system.[8] ORVR consists of an activated carbon canister installed in the vehicle into which vapors being expelled from the vehicle fuel tank are forced to flow. There the vapors are captured by the activated carbon in the canister. When the engine is started, the vapors are drawn off of the activated carbon and into the engine where they are burned as fuel. The EPA promulgated ORVR standards on April 6, 1994, 59 FR 16262.

Section 202(a)(6) of the CAA required that the EPA's ORVR standards apply to light-duty vehicles manufactured beginning in the fourth model year after the model year in which the standards were promulgated, and that ORVR systems provide a minimum evaporative emission capture efficiency of 95 percent. Section 202(a)(6) also

[8] Unlike Stage II, which is a requirement only in ozone nonattainment areas, ORVR requirements apply to vehicles everywhere. More detail on ORVR is available at http://www.epa.gov/otaq/orvr.htm.

provided that upon promulgation of the ORVR rules, Moderate ozone nonattainment areas are no longer subject to the section 182(b)(3) Stage II requirement. However, the section 182(b)(3) Stage II requirement continues to apply for "Serious," "Severe," and "Extreme" ozone nonattainment areas, unless and until under section 202(a)(6) the EPA finds that ORVR is in widespread use in the motor vehicle fleet and issues a rule waiving the section 182(b)(3) Stage II requirement.

Automobile manufacturers began installing ORVR on new passenger cars in 1998 when 40 percent of new cars were required to have ORVR. The percentage of new cars with ORVR increased to 80 percent in 1999 and 100 percent in 2000. ORVR for light duty trucks and vans (<6000 lbs GVWR began to phase-in during 2001 with 40 percent of such new vehicles required to have ORVR in 2001, 80 percent in 2002 and 100 percent in 2003. New heavier vehicles (6001 – 8500 lbs GVWR) were required to have 40 percent with ORVR by 2004, 80 percent by 2005 and 100 percent by 2006. New trucks up to 10,000 lbs GVWR manufactured as a complete chassis were all required to have ORVR by 2006. So, after 2006, most new gasoline-powered vehicles less than 10,000 lbs GVWR are required to have ORVR.

ORVR does not apply to all vehicles, but those not covered by the ORVR requirement comprise a small percentage of the gasoline-

powered highway vehicle fleet (approximately 1.5 percent). The EPA estimates that 60 to 65 percent of vehicles currently on the road have ORVR.[9] This percentage will increase over time as older cars are replaced by new cars. However, under the current regulatory construct, it is likely that there will always be a small percentage of non-ORVR vehicles (light-duty or otherwise) on the roads, and therefore there will likely always be some very small percentage of gasoline refueling emissions that could not be captured by ORVR controls.

Even prior to the EPA's adoption of ORVR requirements, in 1993 the EPA adopted Onboard Diagnostic (OBD) System requirements for passenger cars and light trucks, and eventually did so for heavy-duty gasoline vehicles up to 14,000 lbs GVWR.[10] These systems are designed to monitor the in-use performance of various vehicle emission control systems and components including evaporative emission controls.[11]

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[9] See EPA Memorandum "Onboard Refueling Vapor Recovery Widespread Use Assessment." A copy of this memorandum is located in the docket for this action EPA-HQ-OAR-2010-1076.

[10] See Federal Register at 58 FR 9468 published February 19, 1993, and subsequent amendments and the latest OBD regulations at 40 CFR part 86.1806-05 for program requirements in various years.

[11] The OBD system monitors virtually every component that can affect the emission performance of the vehicle to ensure that the vehicle remains as clean as possible over its entire life. If a problem is detected, the OBD system illuminates a warning lamp on the vehicle instrument panel to alert the driver. This warning lamp typically contains the phrase "Check Engine" or "Service Engine Soon." The

ORVR systems are basically a subset of evaporative emission systems because they share the same vapor lines, purge valves, purge lines, and activated carbon canister. OBD II systems were phased in for these vehicle classes over the period from 1994-1996 for lighter vehicles and 2005-2007 for heavy-duty gasoline vehicles, so during the same time frame that manufacturers were implementing ORVR into their vehicles they already had implemented or were implementing OBD II systems.

In 2000, the EPA published a report addressing the effectiveness of OBD II control systems.[12] This study concluded that enhanced evaporative and ORVR emission control systems are durable and low emitting relative to the FTP (Federal Test Procedure) enhanced evaporative emission standards and that OBD II evaporative emissions checks are a suitable replacement for functional evaporative emission tests in state inspection/maintenance programs.

D. Incompatibility Between Some Vapor Recovery Systems

When an ORVR vehicle is fueled at a service station equipped with a vacuum assist Stage II vapor recovery system, a lack of

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system will also store important information about the detected malfunction so that a repair technician can accurately find and fix the problem. Also, OBD system codes are interrogated and evaluated in over 30 state operated vehicle emission inspection/maintenance programs.

[12] "Effectiveness of OBD II Evaporative Emission Monitors - 30 Vehicle Study", EPA 420-R-00-018, October 2000.

compatibility between the two controls may actually cause the emission reduction of the two systems together to be less than the emission reduction achieved by either system alone. The problem arises when the ORVR canister captures the gasoline emissions from the motor vehicle fuel tank. Instead of drawing vapor-laden air from the vehicle fuel tank into the underground storage tank, the vacuum pump of the Stage II system draws fresh air into the underground storage tank. The fresh air causes gasoline in the underground tank to evaporate inside the underground tank and thus creates an increase in pressure in the underground storage tank. As a result, gasoline vapors may be forced out of the underground storage tank vent pipe into the ambient air. This incompatibility can result in a 1 to 10 percent decrease in control efficiency over what would be achieved by either Stage II or ORVR alone. The decrease in efficiency varies depending on the vacuum assist technology design (including the ratio of volume of air drawn into the underground tank compared to the volume of gasoline dispensed), the gasoline Reid vapor pressure, the air and gasoline temperatures, and the fraction of throughput dispensed to ORVR vehicles. There are various technologies that address this incompatibility, such as nozzles that sense when fresh air is being drawn into the underground storage tank and stop the air flow. Another solution is the addition of processors on the

underground storage tank vent pipe that capture or destroy the gasoline vapor emissions from the vent pipe. Installing these technologies adds to the expense of the control systems and is in some cases a reason to remove Stage II systems.

E. Analytical Approach to Determining Whether ORVR is in Widespread Use

The EPA has considered several possible analytical approaches to determining when and whether ORVR is in widespread use in the motor vehicle fleet. The approach the EPA proposes to use here is to focus on the volume of gasoline that is dispensed into vehicles equipped with ORVR, and to compare the emissions reductions achieved by ORVR alone to the reductions that can be achieved by Stage II controls alone.

Table 1 shows information related to the penetration of ORVR in the national motor vehicle fleet projected to 2020. The overall efficiency of ORVR at reducing refueling emissions increases as older vehicles are replaced by newer ORVR-equipped vehicles. Overall ORVR efficiency is shown in column 5 of Table 1 and is determined by multiplying the fraction of gasoline dispensed into ORVR-equipped vehicles by ORVR's 98 percent control efficiency.

Table 1 - Projected Penetration of ORVR in the National Vehicle Fleet by Year

1	2	3	4	5
Calendar Year	**Vehicle Population Percentage**	**VMT Percentage**	**Gasoline Dispensed Percentage**	**ORVR Efficiency**
2006	39.5%	48.7%	46.2%	45.3%
2007	45.3%	54.9%	52.5%	51.5%
2008	50.1%	60.0%	57.6%	56.4%
2009	54.3%	64.5%	62.1%	60.9%
2010	59.0%	69.3%	66.9%	65.6%
2011	63.6%	73.9%	71.5%	70.1%
2012	67.9%	78.0%	75.6%	74.1%
2013	71.7%	81.6%	79.3%	77.7%
2014	75.2%	84.6%	82.6%	80.9%
2015	78.4%	87.2%	85.3%	83.6%
2016	81.2%	89.4%	87.7%	85.9%
2017	83.6%	91.2%	89.7%	87.9%
2018	85.6%	92.7%	91.3%	89.5%
2019	87.5%	93.9%	92.7%	90.8%
2020	89.0%	94.9%	93.9%	92.0%

See the EPA Memorandum "Onboard Refueling Vapor Recovery Widespread Use Assessment" in the docket (number EPA-HQ-OAR-2010-1076) addressing details on issues related to values in this table.

Note: In this table, the columns have the following meaning.

1. Calendar year that corresponds to the percentages in the row associated with the year.
2. Percentage of the gasoline-powered highway vehicle fleet that have ORVR.
3. Percentage of vehicle miles traveled (VMT) by vehicles equipped with ORVR.
4. Amount of gasoline dispensed into ORVR-equipped vehicles as a percentage of all gasoline dispensed to highway motor vehicles.
5. Percentage from the same row in column 4 multiplied by 0.98.[13]

[13] Based on tests of over 1000 in-use ORVR-equipped vehicles, the average in-use efficiency of ORVR is 98 percent. The legal requirement for ORVR is 95 percent efficiency. Thus, the actual reported control achieved in practice is greater than the statutorily required level of control.

The EPA estimates that the amount of control that ORVR alone would need to achieve to be equivalent to the amount of control Stage II alone would achieve is 77.4 percent. This estimate is based on the expected in-use control efficiency for a typical Stage II program in nonattainment areas under the hypothetical scenario that ORVR does not exist. The EPA estimates that nationally in areas where basic Stage II systems are used the control efficiency of Stage II gasoline vapor control systems is 86 percent. The use of this value depends on the assumption that annual inspections and appropriate maintenance are conducted in a correct and timely manner. This control efficiency is achieved only at refueling stations where a Stage II system is required to be installed, so not all of the gasoline dispensed in a nonattainment area is controlled by a Stage II system. The EPA estimates that the percentage of gasoline dispensed in an area that is covered by Stage II controls is 90 percent.[14] Multiplying the

[14] See section 4.4.3 (especially Figure 4-14 and Table 4-4) in "Technical Guidance - Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities, Volume I: Chapters," EPA-450/3-91-022a, November 1991. A copy of this document is located in the docket for this action EPA-HQ-OAR-2010-1076. This is based on annual enforcement inspections and on allowable exemptions of 10,000/50,000 gallons per month as described in section 324a of the CAA. EPA recognizes that these two values vary by state and that in some cases actual in-use efficiencies, prescribed exemption levels, or both may be either higher or lower.

estimated efficiency of Stage II systems (86 percent) by the estimated fraction of gasoline dispensed in nonattainment areas from Stage II-equipped gasoline pumps yields an estimate of the area-wide control efficiency of Stage II programs of 77.4 percent (0.90 x 0.86 = 0.774 or 77.4 percent). Table 1 indicates this level of control efficiency is expected to be achieved between the end of calendar year 2012 and the end of 2013. The EPA expects ORVR alone to achieve emissions reductions equal to Stage II alone during calendar year 2013; therefore, the EPA is proposing to determine that ORVR will be in widespread use by June 30, 2013, or the midpoint of calendar year 2013.

We also observe from Table 1 that by the end of calendar year 2012 more than 75 percent of gasoline will be dispensed into ORVR-equipped vehicles. The EPA believes that this percentage of ORVR coverage (>75 percent) is substantial enough to inherently be viewed as "widespread" under any ordinary understanding of that term. The dictionary defines "widespread" as meaning "widely diffused or prevalent." Webster's Ninth Collegiate Dictionary, 1348 (1986). Seventy-five percent serves as a reasonable benchmark for this threshold, as it is substantially more than a majority value, and as it is not necessary for something to reach or approach a threshold of

100 percent for it to become "prevalent," which is in turn defined as "generally or widely accepted, practiced or favored." Id., at 933. In Table 1, the percentage of VMT by ORVR-equipped vehicles (column 3) and the amount of gasoline dispensed into ORVR-equipped vehicles (column 4) reach or exceed 75 percent between the end of year 2011 and end of 2012. The EPA believes this provides further support for establishing a widespread use date after the end of calendar year 2012.

III. Proposed Action

The EPA is proposing to determine that ORVR widespread use will occur at the mid-point in the 2013 calendar year, June 30, 2013. The EPA is proposing June 30, 2013, as the effective date for both the determination of ORVR widespread use and a waiver of the CAA section 182(b)(3) Stage II requirement for "Serious," "Severe" and "Extreme" ozone nonattainment areas.

This ORVR widespread use determination and section 182(b)(3) waiver would apply to the entire country, including areas that are not now classified as "Serious," "Severe," or "Extreme" for ozone nonattainment but that may in the future be classified as "Serious," "Severe," or "Extreme" (e.g., a current ozone nonattainment area that may be reclassified to "Serious," "Severe," or "Extreme" as a result

of a state's request or as a consequence for failing to attain the ozone standard by the specified attainment date).

If promulgated, the ORVR widespread use determination and section 182(b)(3) waiver determination would not obligate states to remove any existing Stage II vapor recovery requirements. For states that choose to remove the program, they will need to ensure that removal of the program does not interfere with attainment and maintenance of the NAAQS per CAA section 110(1). Using the effective date of an ORVR widespread use determination and waiver of the section 182(b)(3) Stage II requirement, states that wish to act upon the Stage II waiver and remove existing EPA-approved Stage II requirements from their SIPs would need to submit a SIP revision requesting the EPA to approve such action that is effective after the June 30, 2013, date. States would not need to wait until June 30, 2013, to submit such SIP revision subject to the provisions of CAA section 110(1).

In their SIP analysis, states may elect to conduct area-specific analyses, specifying parameters that are reflective of the types and ranges of equipment and operating patterns in use in the relevant area. Such an individualized analysis performed by a state may demonstrate that there are benefits to retaining the program beyond the widespread use date established by the EPA through national

analysis. States may choose to continue to require or enhance Stage II controls in a particular area if they continue to achieve air quality benefits. Jurisdictions that choose to continue using Stage II systems after the widespread use date should consider taking appropriate actions to correct any excess emission incompatibility between ORVR and vacuum assist Stage II systems.

Section 110(l) precludes the Administrator from approving a SIP revision if it would interfere with applicable CAA requirements (including, but not limited to, attainment and maintenance of the ozone NAAQS and achieving reasonable further progress). Some states may find that by removing Stage II requirements they are reducing the overall level of reductions for which they have previously obtained credit. Such states would need to show that foregoing any additional VOC emissions reductions resulting from Stage II would not interfere with attaining and maintaining the ozone NAAQS in violation of section 110(l). In such circumstances it is possible that additional emissions reductions may be needed to offset the removal of Stage II. It should also be noted that removing Stage II may affect mobile source emissions budgets, so we urge states to consult with the state and local transportation agencies. States could choose to keep Stage II for an additional period of time to allow further ORVR penetration

in the motor vehicle fleet or to obtain equivalent emissions reductions from other sources..

In previous memoranda, the EPA provided guidance to states on removing Stage II at refueling facilities dedicated to certain segments of the motor vehicle fleet (e.g., new automobile assembly plants, rental car facilities, E85 dispensing pumps, and corporate fleet facilities). In these specific cases where all or nearly all of the vehicles being refueled are ORVR-equipped, the EPA could conservatively conclude that widespread use of ORVR had occurred in these fleets. We indicated that we could approve a SIP revision removing Stage II requirements from these facilities with a demonstration that 95 percent of the fleet being refueled is equipped with ORVR.[15] This guidance was based on the EPA's assessment that removing Stage II controls at facilities meeting this criterion would not result in a significant increase in VOC emissions in the nonattainment area and thus would likely satisfy the conditions of CAA section 110(l). The EPA continues to believe this is sound guidance in areas where Stage II is currently being implemented, and is unaffected by the national widespread use determination proposed in this notice.

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[15] "Removal of Stage II Vapor Recovery in Situations where Widespread Use of Onboard Refueling Vapor Recovery is Demonstrated," from Stephen D. Page and Margo Tsirigotis Oge, EPA, December 12, 2006.

The EPA is also proposing that states may demonstrate that ORVR widespread use has occurred in specific areas sooner than the general, national date of June 30, 2013. States would do so by applying the same rationale the EPA is proposing to apply to the national fleet characteristics to area-specific motor vehicle fleet information. A state that provides such a demonstration may request that the Administrator establish a different effective date for waiver of the section 182(b)(3) requirement in a specific area. If the Administrator grants such a waiver for an area currently implementing a Stage II program, the state may request removal of the program from the SIP subject to the constraints of other applicable provisions of law.

States in the Ozone Transport Region (OTR) are also subject to a separate Stage II-related requirement. Under section 184(b)(2) of the CAA (42 U.S.C. § 7511c(b)(2)), all areas in the OTR, both attainment and nonattainment areas, must implement either Stage II or measures that achieve comparable emissions reductions. This independent requirement is not affected by any widespread use determination or waiver of the section 182(b)(3) Stage II requirement granted under section 202(a)(6). The section 184(b)(2) Stage II-related requirement for the OTR will continue to remain in place even after the ORVR widespread use determination and section 182(b)(3) waiver effective

date. This is because the section 184(b)(2) requirement does not impose Stage II per se, but rather is a requirement that OTR states achieve an amount of emissions reductions that corresponds to the amount that Stage II would achieve. Moreover, section 202(a)(6), in allowing for a waiver of the section 182(b)(3) Stage II requirement for nonattainment areas, does not refer to the independent section 184(b)(2) requirement. Thus, all areas in the OTR that are implementing Stage II controls under the requirements of both section 182(b)(3) and section 184(b)(2), or under section 184(b)(2) alone, would need to have adopted measures that achieve emissions reductions that are at least equivalent to those achievable by Stage II, incremental to ORVR, before the EPA could approve a SIP revision removing Stage II controls. The EPA intends to provide additional guidance for OTR states on how they can conduct updated comparability analyses based on the "Stage II Comparability Study for the Northeast Ozone Transport Region," (EPA-452/R-94-011; January 1995) for purposes of removing Stage II under section 184(b)(2).

Before deciding to remove Stage II, state and local agencies should also consider any transportation conformity impacts related to removing Stage II if emissions reductions from Stage II are included in a SIP-approved on-road motor vehicle emissions budget. States may need to adjust conformity budgets or the components of the budget if

removing Stage II requirements after the widespread use date would alter expected air quality benefits.

We request comment on all aspects of our treatment of the ORVR widespread use and section 182(b)(3) waiver issue, including any additional information that would assist the EPA in determining when ORVR widespread use will occur.

IV. Estimated Cost Savings

The EPA has conducted an initial assessment of the costs and savings to gasoline dispensing facility owners related to this proposed action. A report titled, "Draft Regulatory Support Document, Decommissioning Stage II Vapor Recovery, Financial Benefits and Costs," is available in the public docket for this action. The report examines the initial costs and savings to facility owners incurred in the decommissioning of Stage II vapor recovery systems, as well as changes in recurring costs associated with above ground hardware maintenance, operations, and administrative tasks. The EPA estimates cost savings of about $3,277 per year for a typical gasoline dispensing facility, and an annual nationwide savings of $88 million if Stage II is phased out of the approximately 27,000 dispensing facilities outside of California that are required to have Stage II vapor recovery systems under section 182(b)(3) of the CAA. The EPA is

also taking comment on this analysis and the implications to the Stage II waiver.

V. Statutory and Executive Order Reviews

A. Executive Orders 12866 and 13563: Regulatory Planning and Review

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" because it raises novel legal or policy issues arising out of legal mandates. Accordingly, the EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011) and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. Burden is defined at 5 CFR 1320.3(b). It does not contain any recordkeeping or reporting requirements.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency

certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of these proposed regulations on small entities, small entity is defined as: (1) a small business as defined in the Small Business Administration's (SBA) regulations at 13 CFR 121.201;) (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of these proposed regulations on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This proposed rule will not impose any requirements on small entities. Rather, it provides criteria for reducing existing regulatory requirements on entities.

We continue to be interested in the potential impacts of these proposed regulations on small entities and welcome comments on issues related to such impacts.

D. Unfunded Mandates Reform Act

This action contains no federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531-1538 for state, local, or tribal governments or the private sector. The action imposes no enforceable duty on any state, local or tribal governments, or the private sector. Therefore, this action is not subject to the requirements of sections 202 and 205 of the UMRA.

This action is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. This proposed action addresses the removal of a requirement regarding gasoline vapor recovery equipment, but does not impose any obligations to remove these programs.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This action does not impose any new mandates on state or local governments. Thus, Executive Order 13132 does not apply to this rule. In the spirit of Executive Order 13132, and consistent with the EPA policy

to promote communications between the EPA and state and local governments, the EPA specifically solicits comments on this proposed rule from state and local officials.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). It will not have substantial direct effects on tribal governments, on the relationship between the federal government and Indian Tribes, or on the distribution of power and responsibilities between the federal government and Indian Tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this rule.

The EPA specifically solicits additional comment on this proposed rule from tribal officials.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

The EPA interprets EO 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the EO has the potential to influence the regulation. This action is not subject to EO 13045 because it does not establish an environmental standard intended to mitigate health or safety risks.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. It does not impose additional costs on gasoline distribution, but rather promises to lower cost for gasoline vapor control by facilitating removal of redundant controls.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law 104-113, 12(d), (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This rulemaking does not involve technical standards. Therefore, the EPA is not considering the use of any voluntary consensus standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes Federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

The EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. This action proposes to waive the requirement for states to adopt Stage II programs, based on a determination of widespread use of ORVR. The EPA believes that by the date specified in the proposed rule, the amount of control that ORVR alone will achieve

will be equivalent to the amount of control Stage II alone would achieve.

K. Determination Under Section 307(d)

Pursuant to sections 307(d)(1)(K) and 307(d)(1)(V) of the CAA, the Administrator determines that this action is subject to the provisions of section 307(d). Section 307(d)(1)(V) provides that the provisions of section 307(d) apply to "such other actions as the Administrator may determine."

VI. Statutory Authority

The statutory authority for this action is provided by sections 182(b)(3) and 202(a)(6) of the CAA, as amended (42 U.S.C. 7511a(b)(3) and 42 U.S.C.7521(a)(6)). This notice is also subject to section 307(d) of the CAA (42 U.S.C. 7407(d)).

List of Subjects in 40 CFR Part 51

Environmental protection, Administrative practice and procedure, Air pollution control, Ozone, Particulate matter, Volatile organic compounds.

_____
Dated:

_____
Lisa P. Jackson,
Administrator.

For reasons set forth in the preamble, part 51 of chapter I of title 40 of the Code of Federal Regulations is proposed to be amended as follows:

Part 51-REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS.

1. The authority citation for part 51 continues to read as follows:

Authority: **23 U.S.C. 101; 42 U.S.C. 7401-7671q**

Subpart 6 – [Amended] to read as follows:

2. Section 51.126 is added.

§ 51.126 Determination of widespread use of ORVR and waiver of CAA section 182(b)(3) Stage II gasoline vapor recovery requirements

(a) Pursuant to section 202(a)(6) of the Clean Air Act, the Administrator has determined that, effective June 30, 2013, onboard refueling vapor recovery (ORVR) systems are in widespread use in the motor vehicle fleet within the United States.

(b) Effective June 30, 2013, the Administrator waives the requirement of Clean Air Act section 182(b)(3) for Stage II vapor recovery systems in ozone nonattainment areas regardless of classification. States must submit and receive the EPA approval of a revision to their State Implementation Plans before removing Stage II requirements that are contained therein.

(c) Notwithstanding paragraphs (a) and (b) of this section, States may submit to the EPA demonstrations that ORVR systems are in widespread use for areas within their borders as of a date earlier than June 30, 2013, and may request an earlier date for revision or waiver of the Clean Air Act section 182(b)(3) Stage II requirement based on such a demonstration. The Administrator may act on such requests by rule under Clean Air Act section 202(a)(6).